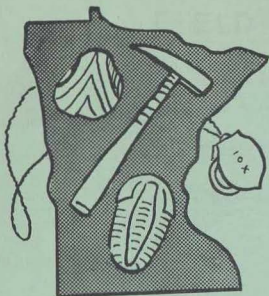


Mar. Apr. May 1982



NEWS

Geological Society of Minnesota

FIRST CLASS



MINNEAPOLIS, MINNESOTA

Ethel A. Shimek - Editor
2745 Colfax Ave. South
Minneapolis, MN 55408

RETURN REQUESTED



GEOLOGICAL SOCIETY OF MINNESOTA



OFFICERS

Pres. Dwight Robinson
 V. Pres. Dick Uthe
 Treas. Elaine Fink
 Sec. Jay Hutchinson

DIRECTORS

Henry Gangl
 Dale Johnson
 George Johnson
 Conrad Nelson
 Elizabeth Ooten

COMING EVENTS

Workshop .. Sat April 3
 Banquet ... April 26
 Field Trips.. June, July & August

PRESIDENT'S MESSAGE

Here's an easy riddle. Put on your GSM thinking caps and match each of the following with a GSM activity: food, fun, travel, participation, expanding horizons. Answers? Food = Spring banquet. Travel = summer field trips. Participation = State Fair. Expanding horizons = 1982 - 83 Lecture Series. Fun = all of the above but I had the Spring Workshop particularly in mind. Actually none of the categories or choices are mutually exclusive. There is something for all and right now they are all on the GSM 'drawing board'. Bad ideas usually get subducted. If you have some good ones, push your plate forward.

Special thanks to Dr. Clement Chase for a bang up lecture series. The GSM "questionometer" nearly went off the scale at 10:00 due NW of midnight. A seismic impact was felt by all.

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Minnesota Geological Society SPRING BANQUET

Monday, April 26 at 6:30 p.m.

Fair Oaks Motel 2335 Third Ave. S.



GUEST SPEAKER

Dr. Robert Sloan, University of Minnesota

THE ORIGIN OF MAMMALS

Dr. Sloan is a paleontologist who has been interested for some time in the extinction of dinosaurs and the rise of mammals. He will talk to us on the origin and evolution of mammals out of the most primitive reptiles into the large variety of creatures we know today. He will discuss how and why the evolution of mammals happened, as well as how good the fossil record really is (contrary to the beliefs of the Creationists), relating the rise of mammals to continental drift and changing global climate.

Cost: \$10.00 including tax, tip and entertainment.

Make paid reservations to:

Robert Handschin
2029 Edgerton Rd.
St. Paul, Minn. 55117
774-1431

Complete dinner:
Turkey and dressing
Mashed potatoes and gravy
Vegetable
Tossed salad
Roll and butter
Beverage

Due on or before April 19

Donation at the door for those
not attending the dinner.

FIELD TRIPS

Field trips this summer will focus on some of Minnesota's Precambrian rock formations -- a chance for us to take a closer look at the geology being described by Dr. G. B. Morey in the spring lecture series. On these trips we will see rocks formed over a 2600 million year span of the earth's past. Dates for the trips are tentative at this time.

1. June 5 -- Early and Middle Precambrian Rocks of East-Central Minnesota led by Dr. G. B. Morey, Minnesota Geological Survey (by car).

The Early and Middle Precambrian rocks in and around the St. Cloud area represent an important aspect of Minnesota's geology. Here there are scattered remnants of the Archean granite-gneiss terrain and the Proterozoic rocks superimposed on them by later events. Dr. Morey has led us on trips to this highly complex area before, and will continue to interpret it for us. He will illustrate how he deduces from these rocks portions of the geologic history he has been outlining in his lecture series.

2. June 19-20 -- The Ancient Rocks of the Minnesota River Valley led by Dr. Paul Weiblen, Univ. of Minn. (by bus).

We will see some of the oldest rocks on the North American continent as they are displayed in a narrow band of the Minnesota River Valley from Franklin to Montevideo. This small strip of rocks was unearthed 10,000 years ago by glacial River Warren, but was formed during Minnesota's early history about 3600 to 1800 million years ago. Dr. Weiblen is a petrologist who can describe for us the many processes involved in their mineralization and metamorphism which indicate significant periods of Minnesota's Archean past.

3. July 10 -- The Volcanics of the Late Precambrian Rift System Exposed at Taylor's Falls led by Dr. David Southwick, Minnesota Geological Survey (by car).

About 1100 million years ago the North American continent started to rift apart, forcing volcanic materials to rise up into a narrow band from Lake Superior to Kansas. Dr. Southwick will show us how these ancient lavas covered the Taylor's Falls area in successive flows. We will examine their many structures, and their stratigraphic relationships with the younger sedimentary rocks exposed in the St. Croix River Valley. We will see how recent glacial events finally sculptured the entire river valley and formed the potholes which characterize this segment of the river today.

4. July 31-Aug. 1 -- The Iron Ores of the Mesabi Range and Their Related Geology led by Dr. Ralph Marsden, Univ. of Minn. Duluth (by car).

Dr. Marsden is an expert on Minnesota's iron formations who will explain to us how these highly rich ores were formed, and how they are being mined and processed today. This trip will possibly include a background briefing and tours through a mine and taconite plant, as well as looking at the associated Middle Precambrian rocks.

Field trip chairman Bob Gunville will announce more details at the final lecture, the workshop, and the spring banquet, and will post sign-up sheets for you to indicate your interest only (not a commitment). People on the list will receive final details of each trip by phone. If you would like your name included but cannot sign up at the meetings, contact Bob at 574-1421.

GEOLOGICAL SOCIETY OF MINNESOTA

When: Saturday, 3 April, 1982 -- 8:30 A.M. - 2:30 P.M.

Where: Van Cleve Recreation Center, corner of 15th Ave. SE and Como Ave., Minneapolis (just north of Dinkeytown and the U of M main campus)

Cost: No registration fee; however, donations to offset rental costs of the building will be gratefully accepted

Lunch: Bring your own bag lunch; coffee, tea, sugar, creamer, and hot water will be furnished by the Society. (The Rec Center has no dining facilities.)

Please bring pencil(s) and eraser(s). Other items will be furnished by the Society.

1982 THEME: SOME ASPECTS OF REGIONAL GEOLOGY AS EXEMPLIFIED IN
NATIONAL PARKS AND MONUMENTS

TENTATIVE SCHEDULE (times, order of presentations, and topics of
presentations subject to change):

- 8:30 - 9:00 Registration, coffee, workshop set-up
- 9:00 - 9:15 Introduction to workshop (Bob Handshin)
- 9:15 - 9:30 Aside: Bob Gunville on 1982 Summer Field Trips
- 9:30 - 10:15 Overview: North American physiographic provinces and their regional geologic settings (Dick Uthe)
- 10:15 - 10:30 Coffee break
- 10:30 - 11:15 Columbia Plateau and Middle Rockies: Yellowstone and Grand Teton Parks and their environs (Bob Gunville)
- 11:15 - 12:00 Northern Rockies: Glacier, Banff, Jasper Parks (Marsha Gunville)
- 12:00 - 1:00 Lunch
Lunchtime Exhibit: Observing the landscape using
aerial stereophotographs
- 1:00 - 2:00 Central Lowlands and Great Plains: St. Croix National Scenic Riverway and its Paleozoic stratigraphy and fossils (Sr. Joan Kain)
- 2:00 - 2:30 Pacific Rim: Hawaii and its volcanic history in Hawaii Volcanoes Park (Jay Hutchinson)
- 2:30 END of Workshop

If you have questions or comments, please let us know !!

Workshop Committee: Bob Handshin (home: 774-1431)
Sr. Joan Kain (work: 690-6718)
Dick Uthe (work: 373-4028; home: 631-9677)

Geological Society of Minnesota Annual Report for Fiscal
Year Ending September 30, 1981

<u>Income</u>		<u>Expenses</u>	
Membership	\$888.00	Lectures	\$600.00
Contributions	80.00	Newsletter	311.50
Banquet*	19.22	Roster	72.30
Workshop*	21.50	Postage	54.28
<u>Operating Income</u>	<u>\$1,008.72</u>	Bank charges	45.17
Interest	336.98	Annual Meeting*	21.65
<u>Total income</u>	<u>\$1,345.70</u>	State Fair	<u>201.94</u>
		<u>Operating Expenses</u>	<u>\$1,307.84</u>
		Public Service	<u>82.36</u>
<u>Operating Deficit</u>	<u>\$290.12</u>	<u>Total Expenses</u>	<u>\$1,390.20</u>

* Banquet, workshop and annual meeting are financed by fees to cover the costs of these events, but may yield a slight surplus or deficit.

<u>Interest Income</u>		<u>Year End Balance in Savings</u>	
		9/30/80	9/30/81
Midland Savings	\$ 6.86	\$ 127.38	\$ 134.24
F & M Certificate	132.19	3,382.23	--
Current Interest	197.93	--	3,397.93
<u>Total</u>	<u>\$336.98</u>	<u>\$3,509.61</u>	<u>\$3,532.17</u>
<u>Change in total (checking plus savings accounts) assets from the previous fiscal year end: +\$52.16</u>		Held in checking acct:	314.42
		Public service	(82.36)
		Prepaid membership	<u>14.00</u>
		<u>Total Savings Funds</u>	<u>\$3,778.23</u>

